## **WA State Consolidated Technology Services State Data Center Projects**

Prepared By:	Consolidated Technology Services
Date: 3/1/2013	Period Covered: February 18 – March 1

## Project Dashboard

Project Dashboard			
Project Name	Scope	Schedule	Budget
SDC Program			
SDC Facilities			
SDC Storage Optimization			
SDC Cloud Utility Service			
OB2/CTS Move Phase 1			
Migrate WSP to SDC			
Virtual Tape Library			
OB2/CTS Move Phase 2			
OB2 Data Center Optimization			
SDC Network (completed)			
SDC Firewall (completed)			

		Baseline Budget as	Actuals as of
		of 12/2012	1/31/2013
Phase #	Phase	Budget	Actuals
0	SDC Program	\$5,850,823	\$2,001,944
1	OB2 Heat Reduction	\$0	
2	Facilities Op Readiness	\$4,908,217	\$3,597,647
3	NW Core Op Readiness	\$8,592,141	\$5,898,371
4	Firewall	\$3,671,579	\$1,255,432
5	Storage Optimization	\$4,294,613	\$1,211,882
6	Cloud Utility Service	\$1,000,000	
7	OB2 Move Phase 1	\$6,652,507	\$389,470
8	Virtual Tape Library	\$1,950,000	
9	OB2 Move Phase 2	\$2,691,811	
	OB2 Data Center		
10	Optimization	\$1,500,000	
11	Migrate WSP	\$2,000,000	
Total		\$43,111,691	\$14,354,746

Scope Key:

G = No issues are impacting scope

Y = Issues are being tightly managed, but may impact scope

R = Unresolved issues are preventing progress of identified scope

### Schedule Key:

G = On schedule

Y = Key milestones are more than 2 weeks late

R = Key milestones are more than 8 weeks late

### **Budget Key**:

E = Planned spending is within 5% to 10% of agreed upon budget
 Y = Planned spending is within 11% to 20% of agreed upon budget

R = Planned spending is greater than 20% of agreed upon budget

**SDC Projects Status** 

Project	Planned for this Reporting Period (February 18 – March 1)	Status of Work Performed this Reporting Period (February 18 – March 1)	Planned for Next Reporting Period (March 4 – March 15)
SDC Program	Continue to work on Design Decisions Receive feedback on SDC-036 Converged Network and update SDC-013 Load Balancing Options in the SDC for CTS applications- receive signatures Complete SDC-038 Storage Switch Ownership- send out for review Complete SDC-040 9509 End-Of-Support Design Alternatives SDC-041 Storage Protocol Use for VMware SDC-042 iSCSI Strategy in the SDC  Continue SDC Technology Lab readiness. Lab scheduled to be ready in April Continue working with facilities on procedures	Continued to work on Design Decisions Pending signature on SDC-036 Converged Network and update SDC-013 Load Balancing Options in the SDC for CTS applications- still waiting on a couple signatures SDC-038 Storage Switch Ownershipsent out for review SDC-040 9509 End-Of-Support Design Alternatives- out for review SDC-041 Storage Protocol Use for VMware- still in progress SDC-042 iSCSI Strategy in the SDC-still in progress Continue SDC Technology Lab readiness. Lab scheduled to be ready in April Continue working with facilities on procedures	Continue to work on Design Decisions Receive signatures-SDC-036 Converged Network and update Receive signatures-SDC-013 Load Balancing Options in the SDC for CTS applications Receive signatures-SDC-038 Storage Switch Ownership- out for review Receive signatures-SDC-040 9509 End-Of-Support Design Alternatives In progress-SDC-041 Storage Protocol Use for VMware In progress-SDC-042 iSCSI Strategy in the SDC  Continue SDC Technology Lab readiness. Lab scheduled to be ready in April Continue working with facilities on procedures
SDC Facilities Prepare the SDC facility for customers. Includes preparing the critical environment (electrical/mechanical), floor space and physical security for customers.	Review SDC facility operations policy and procedures documents with CTS policy team     Expecting new contract by end of February beginning of March from Wright Runstad/Howard S. Wright to proceed with several large projects including creating a telco provider space, procuring enclosure security.	<ul> <li>Working with CTS group to incorporate feedback from policy team on facility operations policy and procedures.</li> <li>New contract agreement finalized between FYI Properties/Wright Runstad and Howard S. Wright. Several large projects are anticipated to be completed including the telco provider space and procuring enclosure security.</li> </ul>	<ul> <li>Submit revised policies and procedures to the CTS policy team.</li> <li>First major project under the new contract is enclosure security. HSW has scheduled a walkthrough with potential bidders for March 14.</li> </ul>
SDC Network Core Establish the network core in the SDC and connect with the OB2 network.	<ul> <li>Continue work on project clean-up tasks         (Cisco DCNM license review, asset State Tag         assignments, and fiber jumpers).</li> <li>Continue work on Project Closure: Lessons         Learned.</li> <li>Gain approval on Cisco Engineering Invoice.</li> <li>Continue review of Cisco Change Order and         Invoice for Rack &amp; Stack SOW.</li> </ul>	<ul> <li>Completed project clean-up work.</li> <li>Completed Lessons Learned draft.</li> <li>Didn't receive approval on Cisco Engineering Invoice.</li> <li>Continue review of Cisco Change Order for Rack &amp; Stack SOW.</li> </ul>	<ul> <li>Final review of Lessons Learned.</li> <li>Gain approval for Cisco Engineering Invoice.</li> <li>Continue review of Cisco Change Order for Rack &amp; Stack SOW.</li> </ul>

Project	Planned for this Reporting Period (February 18 – March 1)	Status of Work Performed this Reporting Period (February 18 – March 1)	Planned for Next Reporting Period (March 4 – March 15)
SDC Firewall Project Replace aged and over- capacity firewalls and deliver enhanced data security services to both OB2 and SDC.	*The firewall implementation project completed and has transitioned to the firewall migration project in the external project section below*	*The firewall implementation project completed and has transitioned to the firewall migration project in the external project section below*	*The firewall implementation project completed and has transitioned to the firewall migration project in the external project section below*
SDC Storage Optimization Replace aged systems and optimize the environment to reduce rates.	<ul> <li>Finish executing hardware functional test and acceptance plan</li> <li>Finish executing software functional test and accept plans</li> <li>Complete the build of a performance test server environment in the SDC and load test software</li> </ul>	<ul> <li>Completed – Execution of hardware functional test and acceptance plan</li> <li>Completed – execution of software functional test and accept plans</li> <li>Completed - build of a performance test server environment in the SDC and load test software</li> </ul>	<ul> <li>Execute Performance Test Plan</li> <li>Evaluate and document Performance Test results</li> <li>Develop Maintenance and Operations Plan</li> <li>Develop design for Watch4Net portal</li> </ul>
Cloud Utility Servers Project Refresh Server Provisioning infrastructure and provide a cloud utility platform for CTS customers.	Continue development of RFQ for support of technology proof of concept rollout     Continue work on Project Scope of Work document	Continue development of RFQ for support of technology proof of concept rollout     Continue work on Project Scope of Work document	<ul> <li>Complete development of RFQ for support of technology proof of concept rollout</li> <li>Complete work on Project Scope of Work document</li> <li>Complete Master Services Agreement with VMWare.</li> <li>Complete initial workshops to identify path forward.</li> </ul>
OB2 Risk Mitigation (CTS Move Phase 1)  Move selected CTS equipment that best alleviates the heat issue in OB2.	Continue execution of the server moves.      Incorporate feedback on the performance measures plan.	<ul> <li>Completed the facilities and network prep work required for physical server move group 1. VLAN extensions are scheduled for the end of March with an April 1 move date.</li> <li>Both server chassis have been installed. These support the virtual server environment.</li> <li>Developed a server preparation and migration checklist.</li> <li>Data migration for servers was added to the scope of the server move effort to reduce the amount of coordination required and improve efficiency.</li> <li>Started Citrix migration planning. Met with Citrix customers on Feb. 25.</li> <li>Finalized the performance measures plan and drafted the task plan and schedule.</li> </ul>	<ul> <li>Continue execution of the server moves. Work the facility and network requirements for physical server move groups 2 &amp; 3.</li> <li>Continue planning and preparation for Citrix migrations on 5/9.</li> </ul>

Project	Planned for this Reporting Period (February 18 – March 1)	Status of Work Performed this Reporting Period (February 18 – March 1)	Planned for Next Reporting Period (March 4 – March 15)
Migrate WSP to SDC	WSP to continue drafting their application	WSP continued drafting their application	WSP to continue drafting their application
Plan and execute the first phase of migrating the WSP data center to the SDC.	inventory and requirements.	inventory and requirements.	inventory and requirements.
Virtual Tape Library Disaster Recovery (VTL)	Storage SEA will research options for moving forward with the VTL environment	No action taken this reporting period.	No activity planned for next reporting period
Procure additional VTL equipment to eliminate the tape backup system and support mainframe disaster recovery.			
OB2 Risk Mitigation (CTS Move Phase 2)	No activity planned for next reporting period	No activity planned for next reporting period	No activity planned for next reporting period
Continue the progress of Phase 1 by moving additional CTS equipment to the SDC.			
OB2 Data Center Optimization	No activity planned for next reporting period.	No activity planned for next reporting period.	No activity planned for next reporting period
Reconfigure remaining equipment in OB2 to optimize airflow and cooling.			

**External Project Collaboration** 

External Project	Planned for this	Status of Work Performed	Planned for Next		
	Reporting Period	this Reporting Period	Reporting Period		
	(February 18 – March 1)	(February 18 – March 1)	(February 18 – March 1)		
Replace Cisco MDS	The team is identifying different approaches to reduce the risk involved with this project.	The team identified a new approach to extend	Gain approval of recommendation and		
9509 SAN Fabric		support of the existing switch. Recommendation	move forward with extending support		
Switches		is in review.	contract.		
Replace SAN fabric switches in OB2 that are at end of vendor support.					
VLAN Renumbering Optimize VLAN numbering	Renumber VLANs per schedule     Develop VLAN Renumbering Process	Continue work on Renumber VLANs per schedule – over 75% complete.     Finalized VLAN Renumbering process.	Continue work on Renumber VLANs per schedule.		

External Project	Planned for this	Status of Work Performed	Planned for Next
	Reporting Period (February 18 – March 1)	this Reporting Period (February 18 – March 1)	Reporting Period (February 18 – March 1)
NAS  Design and implement a new NAS gateway to replace the legacy EMC Celerra NAS.	<ul> <li>Receive signature on SOW from service owner.</li> <li>Receive approval on PO from OLS</li> <li>Continue working with facilities on site prep</li> <li>Develop HLD</li> <li>Schedule security review/audit</li> </ul>	<ul> <li>Did not receive signature on SOW from service owner.</li> <li>Did not receive approval on PO from OLS</li> <li>Continued working with facilities on site prep</li> <li>Working to develop HLD</li> <li>Did not schedule security review/audit</li> </ul>	<ul> <li>Receive signature on SOW from service owner.</li> <li>Receive approval on PO from OLS</li> <li>Continue working with facilities on site prep</li> <li>Continue to develop HLD</li> </ul>
Firewall Migration Migrate 95+ firewalls to the SDC	Firewall mapping exercise will continue throughout the firewall project     Confirm/validate readiness checklist with Network team     Update migration criteria spreadsheet     Create template tech bulletin     Continue migration planning	Firewall mapping exercise will continue throughout the firewall project     Confirmed and validated readiness checklist with Network team     Continuing migration planning     Created template tech bulletin     Updated migration criteria spreadsheet	<ul> <li>Firewall mapping exercise will continue throughout the firewall project</li> <li>Complete design for VPN VRF w/in the SDC</li> <li>Complete design for test connector FW/VRF</li> <li>Complete design for Citrix connections</li> </ul>

# Top Issues \*

Issue Key: Green = Issue does not require action within 30 days, Yellow = Issue requires action within 30 days, Red = Issue requires action within 10 days or less

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Comments/Resolution	Status
132	Roles & Responsibilities for the Storage Switches and converged network need to be defined. This includes who manages the SDC fiber channel switches and the roles and responsibilities for troubleshooting fiber channel over Ethernet (FCoE) across the converged network.	Jeff	Y	11/3/11	3/6/13	3/30/13	The Design Decision document is being routed for review.	Open
145	CTS Service Owners need to know the SDC-related costs so they can determine and publish rates for services	Dan	Y	3/16/12	3/6/13	3/30/13	Dan is working with Finance to prepare a proposed model to OFM/Exec Management.	Open
199	Need to determine the scope and inter-dependencies for VTL	Gordon	Y	7/22/12	3/6/13	TBD	No recent activity on this issue.	Open
209	Space for storage of technology assets.	Doug	Y	11/16/12	3/6/13	3/22/13	Doug is working with service owners to resolve the issue.	Open
211	The risk associated with the proposed 9509 approach is preceived to be higher than other available approaches. Other approaches need to be evaluated and risk assessed. Storage migrations are dependent on a successful implementation.	Gordon	Y	1/7/13	3/6/13	3/22/13	Issue will be closed once the design decision document is signed.	Open

## **Issues Closed this Period**

Issue	Summary Description	Assigned	Priority (R,Y,G)	Next Review Date	Target Resolution Date	Resolution	Status
	N/A						

## **Change Requests \***

No.	Description	Requestor	Request Date	Assigned	Cost Impact	Schedule Impact	Status
	None for this reporting period						

Status (Submitted, Proposal, Approved, Opened, Resolved, Verified, Closed)

Top 5 Risks \*

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
1	Customers that were expecting to come into the SDC right away must now wait longer, which has end of life/investment implications	Man	3	R	G	G	Communicate with customers the new plan and schedule.	Ongoing	Program Manager
2	Timing may force a need to place hardware in OB2, which has an adverse impact on the heat reduction effort.	Сар	2	Y	G	G	<ul> <li>Work with customers to identify solutions that minimize additional heat in OB2.</li> <li>Institute OB2 heat reduction initiatives to turn off unused servers</li> <li>Delay implementation of new hardware in OB2 as late as possible</li> </ul>	Ongoing	Facilities
3	Because the project is large and includes substantial logistical challenges involving multiple projects/agencies, interdependencies will be complex and could be overlooked.	Man	1	R	0	O	<ul> <li>Apply project management practices to manage the effort.</li> <li>Break the work down into small and logical units.</li> <li>Use tools to track tasks, dependencies, issues, risks, etc. and automate the planning and communications as much as possible.</li> <li>Implement migration approaches that minimize impacts of system dependencies, such as spanning the network between the OB2 and SDC data centers.</li> <li>Use development and test platforms to verify system dependencies.</li> </ul>	Ongoing	Sr. Project Manager
4	Even though the scope has been reduced to better match the budget, it may be insufficient. Several items remain unfunded.	Res	1	R	G	0	<ul> <li>Request funding for unfunded projects</li> <li>Identify other funding sources (if possible)</li> <li>Reduce project scope</li> <li>Back-log unfunded projects</li> </ul>	Ongoing	Program Manager
5	Resource Conflict – Program relies on functional staff with competing priorities.	Res	1	R	G	Y	<ul> <li>Provide clear management guidance on priorities and carefully manage functional staff to minimize conflicts in priorities and work tasks.</li> <li>Expand resource management and track task assignments to the resource level. Identify areas in the plan where resource loading indicates a problem and take appropriate action.</li> </ul>	Ongoing	Sr. Project Manager

**Risk Category** = (Res)ources; (Man)agement; (Tec)hnology; (Fun)ctional; (Dev)elopment; (Int)erfaces; (Sec)urity; (Usa)bility; (Ava)ilability; (Per)formance; (Cap)acity; (Sca)lability; (Ext)ernal.

Level of Impact Key:

1=major impact 2=significant impact 3=minor impact

0=no impact

Likelihood Key:

G = Low.

Y = Moderate

R = High

Schedule Key:

G = on schedule

Y = Less than 30 days behind schedule (caution)

R = More than 30 days behind schedule (warning)

Ability to Meet Deadline Key:

= based on current information, it appears manageable

Y = there are significant obstacles or areas of uncertainty or concerns

R = there are clearly identifiable threats or deterioration of ability to manage and control

## **Steering Committee Action Items**

Item #	Item Description	Assigned	Date Assigned	Date Due